6CL8-A

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MEDIUM-MU TRIODE—SHARP-CUTOFF TETRODE

9-PIN MINIATURE TYPE

With heater having controlled warm-up time

GENERAL DATA

Electrical: ←

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current	0.45 ± 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield*°	
Triode Unit:			
Grid to plate	1.8	1.8	μμf
Grid to cathode, tetrode cathode & internal shield, and heater	2.8	2.8	μμf
Plate to cathode, tetrode cathode & internal shield, and heater	1.5	2	μμf
Tetrode Unit:			
Grid No.1 to plate	0.02 max.	0.01 max.	μμf
Grid No.1 to cathode & internal shield, grid No.2, and heater	5	5	μμf
Plate to cathode & internal shield, grid No.2, and heater	2	3	μμf
Tetrode grid No.1 to triode plate	0.015 max.	0.01 max.	μμf
Tetrode plate to triode plate	0.15 max.	0.03 max.	μμf
Heater to cathode (Each Unit)	3	3•	μμf

Characteristics, Class A_1 Amplifier: ←

	Triode Unit	*Tetrode Unit*		
Plate Voltage	125	100	125	volts
Grid-No.2 Voltage	–	70	125	volts
Grid-No.1 Voltage	-1	–	-1	volt
Amplification Factor	40	–	–	
Plate Resistance (Approx.)	5000	–	200000	ohms
Transconductance	8000	7000	6500	μmhos
Plate Current	14	–	12	ma
Grid-No.2 Current	–	–	4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-9	–	-9	volts

← Indicates a change.

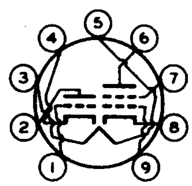
6CL8-A

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Mechanical:

Operating Position. . . . . Any
Maximum Overall Length. . . . . 2-3/16"
Maximum Seated Length . . . . 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip) 1-9/16" ± 3/32"
Diameter. . . . . 0.750" to 0.875"
Dimensional Outline . . . . *See General Section*
Bulb. T6-1/2
Base. . . . . .Small-Button Noval 9-Pin (JEDEC No.E9-1)
→ Basing Designation for BOTTOM VIEW. 9FX

Pin 1 - Triode Grid
Pin 2 - Triode Plate
Pin 3 - Triode Cathode
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Tetrode Plate



Pin 7 - Tetrode Grid No.2
Pin 8 - Tetrode Cathode, Internal Shield
Pin 9 - Tetrode Grid No.1

CONVERTER

→ **Maximum Ratings,** *Design-Maximum Values:*

	Triode Unit as Osc.	Tetrode Unit as Mixer	
PLATE VOLTAGE.	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	–	330 max.	volts
GRID-No.2 VOLTAGE.	–	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value. . .	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts. . . .	–	0.55 max.	watt
For grid-No.2 voltages between 165 and 330 volts.	–	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
PLATE DISSIPATION.	2.5 max.	3 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . .	200 max.	200 max.	volts
Heater positive with respect to cathode . .	200▲ max.	200▲ max.	volts

→ Indicates a change.

6CL8-A

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Maximum Circuit Values:

	Triode Unit	*Tetrode Unit*	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation. . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation. .	1 max.	1 max.	megohm

○ With external shield JEDEC No.315 connected to cathode of unit under test except as noted.

● With external shield JEDEC No.315 connected to ground.

▲ The dc component must not exceed 100 volts.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY